

by Ltjg. Mitch Hobbs

We had just settled into what would be four months of operating in the Persian Gulf. I was Dash 3 of a three-ship supporting a target-familiarization flight in what is known as “The Box.” It was night, and I was looking forward to actually seeing the anti-aircraft artillery that my air-wing brothers had already seen firsthand with their night-vision goggles.

Climbing through 10,000 feet, I donned my NVGs to find the tanker track, approximately 50 miles away. I didn’t feel any air coming from the air ducts in the cabin. I glanced at the cabin-pressure gauge and was glad to see the cabin was pressurizing. I cycled the cabin-temperature knob in manual, in an attempt to return airflow, without any luck.

“Just one more discrepancy to fill out and give to maintenance,” I thought.

During the rendezvous, I was a little nervous because so many strikers were all heading for two KC-10s only 1,000 feet apart. I made my approach. Once on port observation, and number one for the hose, I slid behind into the pre-contact position. The refueling basket was only a few feet away, but it was oscillating up and down about three feet. Once I saw that, I knew that the next couple of minutes would be extremely trying. I waited for what seemed like three minutes for the basket to stabilize, but it never settled down.

With three jets waiting for me to finish tanking, I knew I had better give it my best try. The oscillations dampened for a moment. I pushed the throttles to military power, and the jet surged forward. Applying a little left rudder for lineup at the last second, I watched in amazement as my probe hit brass-to-brass in the center of the basket. With the join completed, all I had to do was worry about the excess closure I had built up in the process. I pulled the throttles

to idle as the hose reel took up slack faster than I had ever seen.

Suddenly, I felt extreme pressure in my ears as the airflow increased. With gale-force winds blasting throughout the cabin, I concentrated on stabilizing while on the hose. The pressure increased until I felt my eustachian tubes painfully opening, trying to equalize the pressure. Two thoughts ran through my head: I could either detach from the tanker and sort things out, or ride it out and hope for the best. I chose the former but as I backed out, the ECS returned to normal. With no reason to disengage, I took my remaining fuel with no further problems.

During the climb, with the throttles at military power, I began to doubt my senses. I thought about the head colds going around the ship and decided my recent experience was a result of my catching the bug. With only a few miles until joining my flight lead and leveling off at nearly 30,000 feet, I gradually pulled the throttles back to the mid-range position.

As the engines spooled down, I felt the same sensation I had while on the tanker: the pressure increased and my ears hurt. Several seconds elapsed as I frantically thought about what to do. I searched my brain to come up with something other than selecting the ram-dump feature of the ECS, which would instantly lower the cabin pressure. At the five-second mark, the pressure gradually began to subside and I continued to troubleshoot. I selected the manual ECS mode and cycled the throttles again with the same results.

After this third time, I made up my mind to avoid cycling the throttles at all costs. With the joinup completed and the pressure seemingly stabilized, still without much ECS airflow, I knew I could continue with the flight. I wondered whether it was my sinuses or the aircraft as I gingerly moved the throttles. I finished the route and headed home.

With a gradual descent into the marshal stack, I convinced myself that my sinuses must be the source of the problem because I

Overpressure in "The Box"

was feeling better. I removed my mask and attempted to valsalva. I cleared my ears perfectly but still was not confident about my nasal passages.

I described my experience to the troubleshooters after landing, and they said that they would have the next pilot check it out. With that in mind, I was off to fill out my flight time and then see the flight surgeon. I talked with the maintenance chief about my situation, and he said to write it up anyway. I did just that, and the aircraft was signed out to another pilot minutes later. An hour and a half later, the same plane, with the same problem, returned.

That pilot and I discussed our experiences and concluded that it was indeed the airplane. I was glad to know that I didn't have a sinus problem, but it bothered me that I had let that aircraft return to service without knowing exactly what happened during my flight.

The next day I dropped by the maintenance department to see what they had found out about the plane. The chief told me that both the primary and the safety pressure regulators were clogged with debris. Without a valve being able to reduce the pressure normally, an overpressure situation exactly like the one I had experienced could result.

Ltjg. Hobbs flies with VFA-86.



Matthew Thomas